Title (en)

IMPROVED FORMULATIONS USING HEAT SHOCK/STRESS PROTEIN-PEPTIDE COMPLEXES

Title (de)

VERBESSERTE FORMULIERUNGEN DURCH VERWENDUNG VON HITZESCHOCK-/STRESS-PROTEIN-PEPTID-KOMPLEXEN

Title (fr)

FORMULATIONS AMELIOREES UTILISANT DES COMPLEXES PEPTIDES-PROTEINES DE CHOC THERMIQUE/DE STRESS

Publication

**EP 1322747 A4 20041229 (EN)**

Application

**EP 01973054 A 20010917**

Priority

- US 0128840 W 20010917
- US 23277900 P 20000915

Abstract (en)

[origin: WO0232923A2] he present invention relates to methods for making compositions comprising heat shock proteins or alpha (2) macroglobulin (" alpha 2M"), which compositions are immunogenic against a type of cancer or an agent of an infectious disease, and the compositions produced by the methods described herein. The invention further relates to methods for eliciting an immune response and the prevention and treatment of primary and metastatic neoplastic diseases and infectious diseases. Specifically, the present invention provides a method of eliciting an immune response comprise administering to an individual a composition made by mixing an amount of a purified first complex comprising a first heat shock protein or alpha 2M complexed to a peptide which displays antigenicity of an antigen of said type of cancer or antigenicity of an antigen of an agent of said infectious disease; and an equal or greater amount of a second heat shock protein or alpha 2M that is not complexed <i>in vitro</ i> to a peptide which displays antigenicity of an antigen of said type of cancer or antigenicity of an antigen of an agent of said infectious disease, respectively; and is not in the form of a complex, said complex having been isolated as a complex from cancerous tissue of said type of cancer or cells infected with said agent of infectious disease, respectively. Optionally, the methods further comprise administering antigen presenting cells sensitized with hsp-peptide or alpha 2M-peptide complexes comprising peptides antigenic to cancer cells or to an agent of an infectious disease.

IPC 1-7

**C12N 5/00**; C12N 15/00; C12P 21/06; G01N 33/53; A61K 38/00; A61K 39/385; A61K 39/00; A61K 39/39; A61K 47/00; A61K 35/14; C07K 1/02; C07K 1/04

IPC 8 full level

**C12N 15/09** (2006.01); **A61K 39/00** (2006.01); **A61K 39/002** (2006.01); **A61K 39/02** (2006.01); **A61K 39/12** (2006.01); **A61K 39/39** (2006.01); **C07K 14/01** (2006.01); **C07K 14/195** (2006.01); **C07K 14/47** (2006.01); **C07K 14/81** (2006.01); **C07K 14/82** (2006.01); **C07K 19/00** (2006.01)

CPC (source: EP US)

**A61K 39/0011** (2013.01 - EP US); **C07K 14/47** (2013.01 - EP US); **C07K 14/8107** (2013.01 - EP US); A61K 2039/5154 (2013.01 - EP US); A61K 2039/6031 (2013.01 - EP US); A61K 2039/6043 (2013.01 - EP US); A61K 2039/622 (2013.01 - EP US)

Citation (search report)

- [E] WO 0234205 A2 20020502 - UNIV CONNECTICUT HEALTH CT [US]
- [A] WO 9834641 A1 19980813 - UNIV FORDHAM [US]
- [A] SRIVASTAVA P K ET AL: "HEAT SHOCK PROTEIN-PEPTIDE COMPLEXES IN CANCER IMMUNOTHERAPY", CURRENT OPINION IN IMMUNOLOGY, CURRENT BIOLOGY LTD. LONDON, GB, vol. 6, no. 5, 1994, pages 728 - 732, XP002037578, ISSN: 0952-7915
- [A] BLACHERE N E ET AL: "Heat Shock Protein-Peptide complexes, Reconstituted In Vitro, Elicit Peptide-specific Cytotoxic T Lymphocyte Response and Tumor Immunity", JOURNAL OF EXPERIMENTAL MEDICINE, TOKYO, JP, vol. 186, no. 8, 20 October 1997 (1997-10-20), pages 1315 - 1322, XP002091660, ISSN: 0022-1007
- [A] BLACHERE N E ET AL: "HEAT SHOCK PROTEIN VACCINES AGAINST CANCER", JOURNAL OF IMMUNOTHERAPY, RAVEN PRESS, NEW YORK, NY, US, vol. 14, no. 4, 1993, pages 352 - 356, XP000973693, ISSN: 1053-8550
- [A] MACARIO A J: "Heat - shock proteins and molecular chaperones: implications for pathogenesis, diagnostics, and therapeutics", INTERNATIONAL JOURNAL OF CLINICAL AND LABORATORY RESEARCH, SPRINGER, BERLIN, DE, vol. 25, no. 2, 1995, pages 59 - 70, XP002097732, ISSN: 0940-5437

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 0232923 A2 20020425**; **WO 0232923 A3 20020801**; AU 9267401 A 20020429; CA 2422867 A1 20020425; EP 1322747 A2 20030702; EP 1322747 A4 20041229; JP 2004524820 A 20040819; US 2002192230 A1 20021219

DOCDB simple family (application)

**US 0128840 W 20010917**; AU 9267401 A 20010917; CA 2422867 A 20010917; EP 01973054 A 20010917; JP 2002536304 A 20010917; US 12636802 A 20020419